



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,516	04/26/2006	Klemens Breitfuss	AT03 0060 US1	9614
65913	7590	02/08/2011	EXAMINER	
NXP, B.V.			JAIN, ANKUR	
NXP INTELLECTUAL PROPERTY & LICENSING				
M/S41-SJ			ART UNIT	PAPER NUMBER
1109 MCKAY DRIVE				2618
SAN JOSE, CA 95131				
NOTIFICATION DATE		DELIVERY MODE		
02/08/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/577,516	BREITFUSS, KLEMENS	
	<b>Examiner</b>	<b>Art Unit</b>	
	ANKUR JAIN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 November 2010.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed November 12<sup>th</sup>, 2010 have been fully considered but they are not persuasive.

As a preliminary comment, the Examiner would like to make it clear on record that "communication partner appliance" clearly reads on radio frequency data communication device 12, and "at least one further communication partner appliance" clearly reads on interrogator 26.

With respect to pages 8-10 of the Remarks, Applicant asserts that the Wood reference does not teach "transmitting a carrier signal not-present signal as a consequence of a missing carrier signal." However, the Examiner strongly submits that according to Column 6 lines 41-46, Column 8 lines 29-42, and Figure 4 of Wood, this claimed limitation is clearly taught by Wood. The Examiner firmly submits that it is well known to one of ordinary skill in the art that transponder 16 of device 12 must internally within the circuit of transponder 16 "transmit a carrier signal not-present signal as a consequence of a missing carrier signal" when internally within the circuit of transponder 16 switching from the active mode to the backscatter mode and switching from a higher power mode to sleep mode when no interrogation signal 27 is received by device 12, as disclosed in Column 6 lines 41-46. The claim language does NOT state whether the "transmission of a carrier signal not-present signal as a consequence of a missing

carrier signal" is an external or internal transmission with respect to the "communication partner appliance." Applicant must clarify the claimed limitations.

With respect to pages 10-11 of the Remarks, Applicant asserts that the Wood reference does not teach "generating and transmitting, within the circuit of the communication partner appliance, a command-end signal that represents the end of the transmitted command signal." However, the Examiner strongly submits that according to Column 9 lines 22-40 of Wood, this claimed limitation is clearly taught by Wood. As noted above, "communication partner appliance" clearly reads on the radio frequency data communication device 12 which houses transponder 16. The Examiner firmly submits that "command-end signal that represents the end of the transmitted command signal" clearly reads on the actual data contained at the "end" of the transmitted reply from transponder 16, which follows the preamble and Barker or start code. One of ordinary skill in the art will clearly understand that the actual data, or "command-end signal," must be "generated and transmitted within the circuit" of radio frequency data communication device 12 before being transmitted to interrogator 26.

With respect to pages 11-13 of the Remarks, Applicant asserts that the alleged inherency and well-known status in the art are improper. However, the Examiner strongly disagrees. The Examiner strongly submits that "detectors for detecting the presence of the received carrier signal, these detectors transmitting a carrier signal present signal in the event that the carrier signal is present, and otherwise transmitting a carrier signal not-present signal as a consequence of a missing carrier signal" is clearly taught by Column 6 lines 41-46, Column 8 lines 29-42, and Figure 4 of Wood. The

Examiner firmly submits that it is well known to one of ordinary skill in the art that transponder 16 of device 12 must internally within the circuit of transponder 16 "transmit a carrier signal present signal and carrier signal not-present signal" when internally within the circuit of transponder 16 switching between the active mode and backscatter mode and switching between the higher power mode and sleep mode depending if an interrogation signal 27 is received by device 12 or not, as disclosed in Column 6 lines 41-46. One of ordinary skill in the art will clearly understand that these internal transmissions within the circuit of transponder 16 of device 12 must occur in order for device 12 to function, and are properties of a radio frequency data communication device when communicating with an interrogator.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood, Jr., US Patent 6,466,771 B2 (hereafter referenced as Wood).

Regarding **Claim 1, 5, and 11**, Wood teaches a circuit, this circuit being provided for a communication partner appliance that is designed for contact less communication and as a data carrier, this communication partner appliance being provided for a communication system with at least one further communication partner appliance, in

which circuit a first communication mode or a second communication mode can be activated (see Column 8 lines 29-42 and Figure 4), and which circuit has the means listed below: "activators for activating the first communication mode or the second communication mode" (Column 8 lines 29-42 and Figure 4). Wood also teaches "reception means for receiving a carrier signal that is transmitted by the at least one further communication partner appliance" (see Column 7 lines 65-67, Column 8 lines 1-29, and Figure 4). Wood also teaches "detectors for detecting the presence of the received carrier signal, these detectors transmitting a carrier signal present signal in the event that the carrier signal is present, and otherwise transmitting a carrier signal not-present signal as a consequence of a missing carrier signal" (see Column 8 lines 29-42 and Figure 4). The Examiner firmly submits that it is inherent and well known to one of ordinary skill in the art for transponder 16 to internally within the circuit "transmit a carrier signal present signal in the event that the carrier signal is present, and otherwise transmit a carrier signal not-present signal as a consequence of a missing carrier signal" when internally within the circuit of transponder 16 switching between active and passive modes. Wood also teaches "command signal recognition means for recognizing a command signal that can be transmitted with the aid of the carrier signal and for generating and transmitting, within the circuit of the communication partner appliance, a command-end signal that represents the end of the transmitted command signal" (see Column 7 lines 65-67, Column 8 lines 1-29, and Column 9 lines 22-40). "Command-end signal that represents the end of the transmitted command signal" clearly reads on the transmitted reply from the transponder which consists of the

preamble, Barker or start code, followed by actual data. This is sent after the interrogator has finished, or “ended” transmitting the “command signal.” Wood also teaches “a first activation signal can be transmitted when the carrier signal present signal is present, and otherwise a second activation signal can be transmitted, with which first activation signal the circuit can be brought into the first communication mode with the aid of the activators, and with which second activation signal the circuit can be brought into the second communication mode with the aid of the activators” (see Column 8 lines 29-42 and Figure 4). The Examiner firmly submits that it is inherent and well known to one of ordinary skill in the art for transponder 16 to internally within the circuit “transmit a first activation signal when the carrier signal present signal is present, and otherwise transmit a second activation signal” when internally within the circuit of transponder 16 there is switching between active and passive modes. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Wood so that after the occurrence of the command-end signal at a given measurement point in time, there are determination means to determine whether the carrier signal present signal is present, for the purpose of increasing the functionality and versatility of the interrogator 26 and transponder 16 RFID system of Wood by incorporating another determination/detection means for detecting the carrier signal present signal after a given measurement point in time.

Regarding **Claim 2**, Wood teaches, “wherein the activators are designed to activate a passive communication mode as the first communication mode as the first communication mode and an active communication mode as the second

communication mode wherein in the case of the active communication mode a power supply for the circuit is provided that is independent of the carrier signal and in the case of the passive communication mode a power supply for the circuit is provided that is dependent on the carrier signal" (see Figure 4, Column 6 lines 41-46, and Column 8 lines 29-41).

Regarding **Claim 3**, Wood teaches "wherein a battery or accumulator is provided for the independent power supply" (see Figure 1 element # 18).

Regarding **Claim 4**, Wood teaches "a communication partner appliance that is designed as a data carrier and is equipped with a circuit" (see Figure 1 and Column 4 lines 1-36).

Regarding **Claim 6**, Wood teaches "wherein the arranging means are designed for the optional arrangement of an active communication mode or a passive communication mode, in which active communication mode the further communication partner appliance has a power supply that is independent of the carrier signal, and in which passive communication mode the further communication partner appliance has a power supply that is dependent on the carrier signal" (see Figure 4, Column 6 lines 41-46, and Column 8 lines 29-41).

Regarding **Claim 7**, Wood teaches "wherein energy source recognition means are provided, these energy source recognition means being adapted to recognize an energy source for supplying power to the circuit, and with which energy source recognition means an energy source recognition signal can be transmitted depending on the energy source that has been recognized, and wherein the arranging means are

designed to arrange the communication mode depending on the energy source recognition signal" (see Figure 4, Column 6 lines 41-46, and Column 8 lines 29-41).

Regarding **Claim 8**, Wood teaches "wherein response signal detectors are provided, for detecting a response signal transmitted by the further communication partner appliance, in the course of which detection a change-over signal can be generated, and wherein the arranging means are designed to automatically arrange the communication mode depending on the change-over signal that has been generated" (see column 7 lines 65-67, column 8 lines 1-41, column 8 lines 54-67, and column 12 lines 44-67).

Regarding **Claim 9**, Wood teaches "wherein influencing means are provided for influencing a signal strength of carrier signal depending on the arranged communication mode" (see column 7 lines 65-67 and column 8 lines 1-28).

Regarding **Claim 10**, Wood teaches "a communication partner appliance that is designed as a communication station and is equipped with a circuit" (see Figure 4).

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ankur Jain whose telephone number is 571-272-9747. The examiner can normally be reached on M-F, 7:30 am to 5:00 pm, EST, Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuwen Pan, can be reached on 571-272-7855. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ankur Jain/

Examiner, Art Unit 2618

Application/Control Number: 10/577,516

Page 10

Art Unit: 2618

01/29/2011

/Duc Nguyen/

Supervisory Patent Examiner, Art Unit 2618